

REMARKS

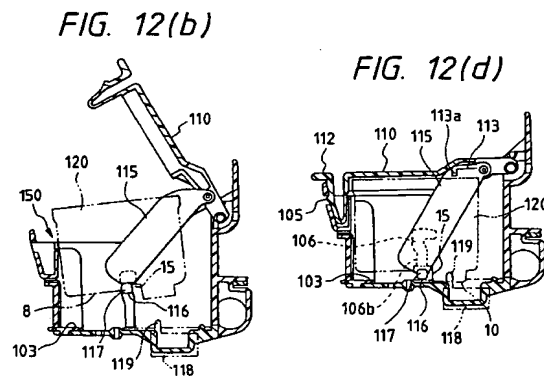
A final Office Action, dated September 3, 2002, rejects pending claims 1-25. Claims 1, 12, & 17 have been rewritten herein. Applicants have submitted a Request for Continued Examination concurrently herewith. Reconsideration is respectfully requested in light of the amendments and the following remarks.

Claim Rejections Under 35 USC § 102(e)

Applicants respectfully traverse the examiner's rejection of claims 1-5 and 8-16, 21-23 and 25 as being anticipated by Miyazawa et al. (U.S. Pat. No. 6,250,750). Miyazawa et al. discloses a fundamentally different structure.

As explained more fully in the specification of the present application, among other benefits, the carriage assembly of the present application provides an on-axis ink reservoir that allows easy and independent access to both the ink reservoir and the printhead without requiring removal of the ink reservoir from its secured position in order to gain access to the printhead.

In contrast and as shown in the below figures, Miyazawa et al. discloses an ink cartridge alignment and capture structure that does not allow access to a printhead without first removing the ink reservoir.



FIGS. 12(b) and 12(d) of Miyazawa et al. (U.S. Pat. No. 6,250,750).

In particular, Miyazawa et al. teaches inserting an ink cartridge 120 into a carriage 101 with an open carriage cover body 110 as shown in FIG. 12(b) such that the lower portion of the ink cartridge engages a support rod 117, which has been lifted by a lifter 115 extending between the support rod 117 and the carriage cover body 110. By placing the carriage cover body 110 in its closed position as shown in

FIG. 12(d), the support rod 117 and connected ink cartridge are guided into the carriage. The carriage cover body includes a catching piece 112 to detachably hold the carriage cover body in its closed position, thereby securing the ink cartridge 120 within the carriage.

FIGS. 12(a)-(d) of Miyazawa et al., show that the "recording head" 118 is accessible only when the ink cartridge 120 is completely removed from the carriage 101. There is no teaching or suggestion in Miyazawa et al. or any other references of record, to provide a structure that allows an ink reservoir to remain in a secured position on the carriage while still allowing easy access to the corresponding printhead.

Claims 1 and 12:

Turning to the claims of the present application, claims 1 and 12, as amended, now specifically call for access to the printhead "without removing said ink reservoir from said secured position." (emphasis added).

Claim 17:

Similarly, claim 17, as amended, specifically calls for "providing access to said first printhead without removing said ink reservoir from said secured position." (emphasis added).

Claim 21:

Applicants respectfully traverse the examiner's rejection of claim 21. As currently drafted, claim 21 calls for "providing easy access to the printhead without detaching said ink reservoir from said secured position on said second mounting portion." (emphasis added.)

As previously noted, Miyazawa et al. discloses no such structures. The examiner has taken the position that FIG. 12(b) of Miyazawa et al. shows an ink reservoir remaining in a secured position and providing easy access to the printhead. Applicants respectfully traverse the examiner's position. In particular, FIG. 12(b) shows the ink cartridge 120 blocking access to the recording head 118 even when it is detached from the recording head 118 and fully lifted by the support rod 117. The ink cartridge 120 in Miyazawa et al. must be removed before the recording head may be accessed.

Since Miyazawa et al. neither teaches nor suggest these essential elements of independent claims 1, 12, 17 and 21, they cannot be rendered obvious or anticipated by this reference, and they should be allowed. Moreover, since dependent claims 2-11, 13-16, and 22-25 depend on these now allowable claims, they too should be in condition for allowance.

Claim Rejections Under 35 USC § 103

Applicants respectfully traverse the examiner's rejection of claims 6, 7 and 17-20, and 24 as being rendered obvious by Miyazawa et al. (U.S. Pat. No. 6,250,750) in view of Inoue et al. (U.S. Pat. No. 5,619,237) and Oda et al. (U.S. Pat. No. 5,552,816).

None of these references, alone or in combination, teach or suggest the elements of the present claims. As previously noted, Miyazawa discloses an ink cartridge alignment and capture structure that does not allow independent access to both an ink reservoir and printhead. Similarly, Inoue and Oda disclose conventional drop-in type ink cartridge mounts, none of which allow an on-axis ink reservoir to remain seated in its mount while a printhead is being replaced.


Since these teachings are missing from these references of record, they cannot render claims 6 and 7, and 17 obvious. Accordingly, they should be allowed. Moreover, since dependent claims 18-20 and 24 depend on this now allowable claim, they too should be in condition for allowance.

In view of the foregoing, applicants submit that all of the currently pending claims are in condition for allowance, and respectfully requests that the case be passed to issuance. If the Examiner has any questions, he is invited to contact applicants' attorney at the below-listed telephone number.

Respectfully submitted,

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Attachment A to Amendment
(Redlined amendments to claims)

1. (Twice Amended) A carriage for an inkjet printer comprising:
a first mounting portion;
a printhead operably secured to said first mounting portion;
a second mounting portion pivotally secured to said first mounting portion at a pivot point;
an ink reservoir operably secured to said second mounting portion in a secured position and having an engaged position in which the ink reservoir is in fluid communication with said printhead when said ink reservoir is in said secured position, and an open position, in which the second mounting portion is pivoted about said pivot point away from said first mounting portion and said ink reservoir remains in said secured position thereby pivoting said ink reservoir about said pivot point away from the printhead [and providing easy access to the printhead without detaching said ink reservoir from said second mounting portion]such that said printhead may be accessed without removing said ink reservoir from said secured position.

12. (Twice Amended) An inkjet printer comprising:
a chassis;
a motor;
a carriage operably secured to the chassis and driven by the motor for reciprocal movement relative to the chassis;
a printhead operably secured to said carriage;
an ink reservoir operably secured to said carriage in a secured position such that said ink reservoir may pivot about said printhead at a pivot point while remaining in said secured position, said carriage having an engaged position in which the ink reservoir is in fluid communication with said printhead when said ink reservoir is in said secured position, and an open position, in which the ink reservoir is pivoted about said pivot point away from said printhead, [thereby providing easy access to the printhead]such that said printhead may be accessed without removing said ink reservoir from said secured position.

17. (Twice Amended) A method for replacing a first printhead operably secured to a carriage of an inkjet printer with a second printhead, the inkjet printer having an on-axis ink reservoir pivotally secured to the carriage defining a secured position of the ink reservoir with respect to the ink reservoir mounting-portion and defining an engaged position in which the ink reservoir is in fluid communication with the printhead, said method including the steps of:

locating the carriage containing the first printhead;

pivoting the ink reservoir out of its engaged position such that the first printhead is exposed and easily accessible in the carriage while maintaining said ink reservoir in said secured position, and thereby automatically disconnecting the fluid communication between the ink reservoir and the first printhead and providing access to said first printhead without removing said ink reservoir from said secured position;

removing the first printhead from the carriage while maintaining the ink reservoir in said secured position;

installing the second printhead in the carriage such that the second printhead is operably secured to the carriage while maintaining the ink reservoir in said secured position; and,

returning the ink reservoir to its engaged position thereby automatically placing the ink reservoir and second printhead in fluid communication with each other without removing said ink reservoir from said carriage.